# Harvard Business Review

# FUNDING IT TRANSFORMATION:
## HOW COMPANIES CAN GET PAST LEGACY LOCK-IN AND STOP PLAYING CATCH-UP

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Ask any CEO what is demanded from them today and we're likely to say business transformation. From the largest Fortune 100 to the mom-and-pop shop around the corner, there is a clear imperative to innovate. As has been widely acknowledged, technology is a strategic lever for business progress. It is the nature of strategy; however, investment is required for implementation—and therein lies the challenge.

Truth is, funding transformation is not so easy. Innovating beyond the limits of incremental IT investments and small budgets is complex, time-consuming, and unpredictable. I often speak with organizations in the midst of this quandary. These are well-established companies (like yours, no doubt) with experienced leadership, satisfied customers, and stakeholders eager to move ahead. When it comes to developing a funding model to drive IT transformation, the question I typically hear is "How do I get started?"

Though industry disruption (aka the "Uber effect") may grab your attention, what you're additionally up against is the competitor next door. Easy to forget amid the hubbub and media buzz, competitive disruption can quickly snap up your market share. IT budgets are growing at a snail's pace—two percent of annual revenue on average. Despite the need to fund innovation, the majority continues to disappear into the money pit known as legacy IT. This means you have to be as inventive as possible in creating financial capacity for new IT investments.

The traditional one-size-fits-all model has given way to more flexible options for you to acquire, pay for, and use IT. The good news is that your organization is likely sitting on an investment base that can be monetized to transform legacy IT. The process of doing this moves your IT from a complex mass of application entanglements (known as "technical debt" by most CIOs) to an innovation engine. Together with investment strategies structured around your KPIs, fixed budgets open up to become virtual and expanded budgets that fuel growth. Risk can be managed, costs matched to revenue, balance sheets better optimized, and true cost of use established.

Determining which funding model will serve your business best can be a complicated question. As a fellow business leader, I can tell you the process won't be easy. But it will be worth it. Bear in mind, every journey begins with the first step.

Irv Rothman
President and CEO
HPE Financial Services

# FUNDING IT TRANSFORMATION: HOW COMPANIES CAN GET PAST LEGACY LOCK-IN AND STOP PLAYING CATCH-UP

The accelerating pace of change has left many organizations in a catch-22: they need to speed up IT transformation, but their existing funding processes leave no flexibility to make more than incremental change. To drive innovation successfully, top leaders must rethink how they acquire and pay for IT.

IT executives at organizations worldwide must often feel like characters in Lewis Carroll's *Through the Looking-Glass*—running as fast as they can but unable to make much progress. In today's fast-moving and increasingly digital business world, companies need powerful, flexible, and innovative IT operations to keep up with the latest developments and to give them a competitive edge. However, too many organizations suffer from a "legacy lock-in" problem that makes it all but impossible to transform their existing systems into the digital architecture they need to accelerate revenue growth, improve the customer experience, and deliver new products and services to the market.

Legacy lock-in results from a conventional approach to acquiring IT based on long-term ownership. This generally entails large capital investments in hardware and applications intended to last at least five and perhaps as long as ten years, often with significant over-provisioning to ensure room for growth.

As this equipment ages, maintenance costs rise, as does depreciation. Together with software licensing costs, up to 70 percent or more of the IT budget can be consumed.

Now consider this budgeting dilemma in light of today's demands for accelerated IT transformation. In many cases, the burden of figuring out how to invest in new technology falls upon the CIO. While the demands to act fast can be relentless, the CIO may feel powerless with so much capital locked up in maintaining existing legacy technology.

Of course, CIOs do not end up in this situation on their own, nor is this burden one for any individual to bear alone. Many organizations are structured around a fixed, long-term commitment to technology that may have made sense to management years ago, but does not today. What's frequently needed is a new, more flexible funding strategy that drives innovation and empowers organizations to acquire and pay for new technology predictably. Without it, even the best companies can find themselves standing still in fast-moving, increasingly competitive markets.

## GETTING OUT OF THE GATE

The challenge of funding transformation is not a new one, says Richard Villars, a vice president at global consultancy IDC Research (IDC), which offers market intelligence and advisory services to the IT, telecommunications, and consumer technology markets. He explains that the accelerating pace of change and shift to constantly evolving mobile technologies has only made it more urgent for companies to escape the trap.

Villars, who specializes in data center transformation and cloud technologies, says that many companies have legacy systems built 20 to 30 years ago. As business models and technologies evolved, they simply added systems with new capabilities on top.

In many cases, organizations have implemented suites of applications built independently using different standards. Today, these systems are not that well connected, because interdependency adds costs and complexity whenever a company makes changes to a single application. "These legacy systems are critical to their businesses, but the way they are built and operated means that complexity increases as they try to adapt to new developments," says Villars.

As employees and customers rely increasingly on mobile devices and applications that are continually updated, Villars says the need to create a new type of user experience is causing grief for a companies' legacy applications. "Companies want to change the interface and user experience, but the rest of the system creates a big barrier," he says.

However, it's increasingly clear that the ability to support modern technologies such as cloud, mobile computing, big data, and social media is crucial. A 2015 survey by Harvard Business Review Analytic Services found that these technologies have become critical to most organizations and are spurring far-reaching enterprise transformation. figure 1

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**FIGURE 1**

**NEW TECHNOLOGIES KEY TO DIGITAL TRANSFORMATION**

Percentage of respondents indicating that these critical technologies are transforming their organizations.

| Technology | Percentage |
|---|---|
| Big data | 70 |
| Mobile | 66 |
| Cloud | 62 |
| Social media | 57 |
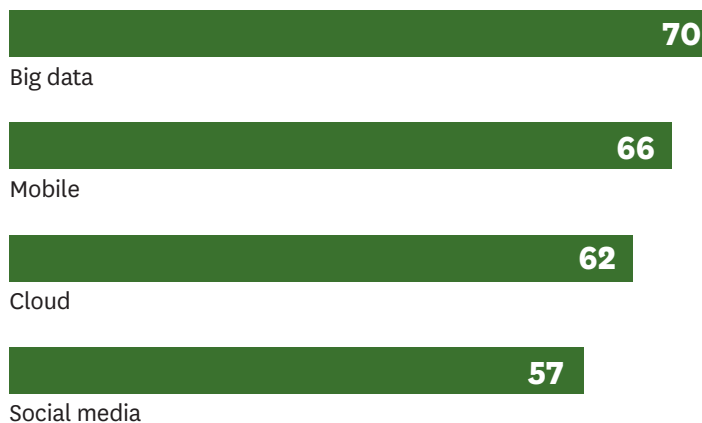
SOURCE "THE DIGITAL TRANSFORMATION OF BUSINESS," HARVARD BUSINESS REVIEW ANALYTIC SERVICES, JANUARY 2015

> For most organizations, the problem remains how to get from where they are to where they want to go, and how to pay for it.

## CHOOSING THE RIGHT DESTINATION

The imperative to move quickly means that the traditional approach to refreshing an organization's IT systems no longer works from either a technological or a financial perspective.

Many companies have concluded they no longer want to own IT assets. Instead, they seek a flexible, pay-as-you-go model that allows for both constant innovation and a fairly predictable monthly outlay. According to a recent IDC report, by 2017 half of all companies will demand payment models from vendors based on usage for major IT and data center investments.

While public cloud SaaS and IaaS (software and infrastructure as a service) solutions might seem attractive for most large organizations, they are not always a practical option for mission-critical functions, not least because of concerns about security, privacy, and compliance. For those applications where strict data control still favors in-house systems, many organizations are opting instead for hosted private cloud or hybrid cloud approaches. Such systems can leverage hardware virtualization, networking, and storage to create computing that automatically scales with usage.

Once in place, these approaches make it easier to rapidly update the software and user interfaces without necessarily reconfiguring the nuts and bolts of the system each time. That allows a company to compete more effectively and consistently refresh its technology in line with new developments.

## FINDING THE MEANS TO GET THERE

For most organizations, the problem remains how to get from where they are to where they want to go, and how to pay for it. Migrating from a snarl of incompatible stand-alone legacy systems to a smoothly functioning cloud environment is a formidable challenge, and few organizations have all the necessary expertise in-house. Moreover, doing so can be very expensive. However, according to IDC's Villars and other experts, at least 70 percent of IT budgets go toward keeping legacy systems running, a proportion that only rises as assets age. So there is little left for innovation or new investment.
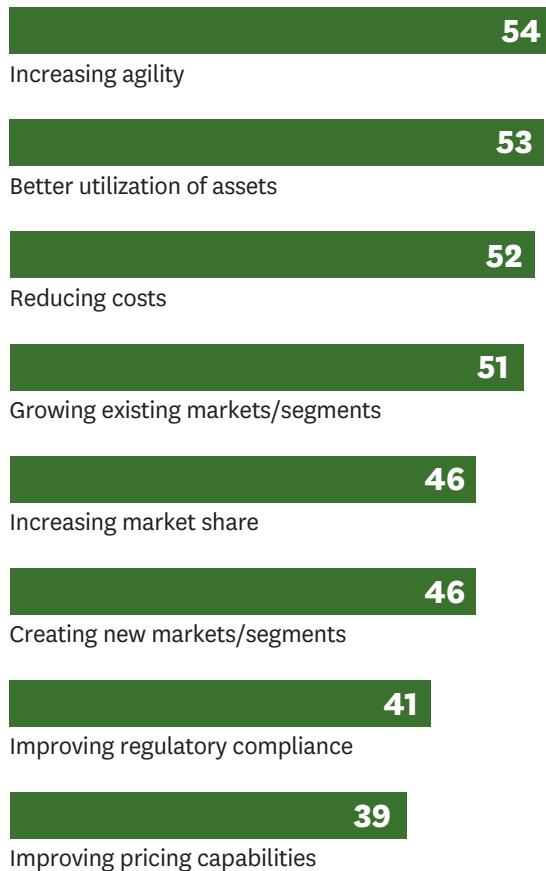
Part of the problem is the way most corporate executives regard IT: as a necessary part of the organization's "plumbing," not as an important contributor to the bottom line or as a means of creating competitive advantage. That perspective means that CFOs and corporate boards are generally reluctant to simply boost the already significant IT budget—which can already run up to hundreds of millions of dollars—to finance that investment. In order to find the necessary funding, they need to develop alternative approaches by shifting that perspective—something that is already happening in some organizations. figure 2

FIGURE 2

## IMPACT OF DIGITAL TECHNOLOGIES

How respondents rated the impact of digital technologies on their organizations.

TOP BOX SCORES 8-10 WHERE 1=NO IMPACT AT ALL AND 10=EXTREMELY POSITIVE IMPACT

**54**
Increasing agility

**53**
Better utilization of assets

**52**
Reducing costs

**51**
Growing existing markets/segments

**46**
Increasing market share

**46**
Creating new markets/segments

**41**
Improving regulatory compliance

**39**
Improving pricing capabilities

**SOURCE** HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, MARCH 2016

Because innovative deployment of mobile and big data technologies can create a competitive edge, some new funds may come from the budgets of business lines that will benefit. A well-thought-out funding strategy can help companies find ways to release the value of their existing equipment and systems through sales and loans. In the process, it's essential to create a road map that phases in infusions of cash when most needed to enable investment in new technology and removal of old.

However, all this takes considerable collaboration among IT, financial, and departmental executives—something many organizations find difficult to do on their own. Most will likely need third-party partners to help open lines of communication, and to work with stakeholders to assess what physical and software assets the company owns, how these assets work together, and what the company needs now or over a planned period of time—as well as to help craft solutions.

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On the budgetary side, other outside specialists increasingly offer a variety of solutions that build in the flexibility and predictability needed to create a "consumption model" for IT financing. Today, organizations can make choices to create financial capacity. Existing technology can be leveraged as collateral to unlock cash value that can be applied to new investments.

Other agreements include targeted, flexible-capacity arrangements that don't necessarily lock down usage in advance. Such an agreement can make equipment available immediately—both on or off premises—and phase in usage as needed, with the company paying only for its consumption.

## VAULTING OVER OBSTACLES

Naturally, each organization's challenges and path toward the future will be different. One example is Airbus Helicopters, a division of the aerospace and defense group Airbus, which turned to several different outside partners to help it transform its data centers, rework its desktop computing systems, and reconfigure its networks. Using a combination of financing, usage-based payments, and hosting arrangements, Airbus today pays a set amount per year, with a provision for scheduled or as-needed refreshing of equipment and software.

Catherine Jestin, the division's CIO, says that the company needed to do everything it could to reduce the amount of capital investment needed for these transformations because of the huge amount it needs to spend keeping a variety of old applications and systems running. "We are designing, producing, and supporting products with an extensive life cycle—40 to 50 years. We still have helicopters in the air that were designed and built in the early 1970s," she says.

To maintain the certification of these aircraft, Airbus needs to conserve the IT systems, applications, and data originally used for their design, production, and maintenance. This "obsolescence wall" was impeding efforts to modernize other systems by consuming a huge chunk of its IT budget, explains Jestin.

For its data centers, Airbus opted for a hosting service with a private cloud infrastructure, divided between two outside providers. It no longer owns the servers, as it did previously, although it uses an outside contractor to operate them. "In the helicopter business there are major ups and downs, and in a down year, it was hard to justify spending €6 million just to replace obsolete servers without actually improving anything," she says.

Another European giant, a leading global company in the power and automation fields, is also using a variety of outside providers. Its goal is to migrate to an IT consumption model, a project now in its third year. With financing help and technology support from three major partners, the

> There is a lot of cultural and behavioral change required, and at its core, this is a business model conversation—it's not just IT at this stage.

company was able to embark on a multimillion-dollar transformation project without asking the board of directors for additional funds, according to the top company IT executive.

He says the company, which had 20-year-old legacy systems serving operations worldwide that were very expensive to maintain, is migrating to a combination of hosted solutions and public and private cloud solutions. "The project has already begun to deliver the savings we were looking for," he says, and has freed up money for more research and development on the IT side.

The company's systems are becoming better aligned with its business and more truly standardized globally. "Before this, we probably did things more than 100 different ways in the more than 100 countries where we operate," says the CIO.

## WHERE NEXT?

For companies seeking outside help in order to shed their legacy systems and accelerate digital transformation and revenue growth, it's important to look at all the possibilities. CIOs and CFOs need to determine exactly what they need the new architecture to do and ask providers for a mix of financing and technology solutions precisely crafted to meet those needs.

On the funding side, companies have the power to choose how they fund technology today. Being aware of those options can help create financial capacity that is needed to drive IT innovation.

On the technology side, a combination of in-house hosting, outsourcing, and hybrid public/private cloud solutions can give CIOs the agility they need to keep up with evolving mobile and big data developments.

With the right financial and IT structure in place, executives will finally be able to stop running in place—and get to where they want to go.

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